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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/749,937	12/29/2000	Donald Brent Marshall	56130.000045	6809

7590 02/09/2005  
Hunton & Williams  
1900 K Street, N.W.  
Washington, DC 20006-1109

EXAMINER
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PHAN, TAM T

ART UNIT	PAPER NUMBER
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2144

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/749,937	MARSHALL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tam (Jenny) Phan	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12/15/2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6,8-13,15-21,23 and 25-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6,8-13,15-21,23 and 25-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This application has been examined. Amendment received on 12/15/2004 has been entered.
2. Claims 1-4, 6, 8-13, 15-21, 23 and 25-27 are presented for examination.

#### *Priority*

3. No priority claims have been made.
4. The effective filing date for the subject matter defined in the pending claims in this application is 12/29/2000.

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, 6, 8-13, 15-21, 23 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumelsky et al. (U.S. Patent Number 6,463,454), hereinafter referred to as Lumelsky in view of Qureshi et al. (U.S. Patent Number 5,920,820), hereinafter referred to as Qureshi.

7. Regarding claim 1, Lumelsky disclosed a system for enabling distribution of service functionality across network elements in a network comprising: a) a service logic execution engine for enabling service logic to execute on one or more nodes in the network (Figures 2 & 10; column 23 lines 62-67); b) a determination means for determining a preferred distribution scheme wherein the distribution scheme involves

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placement of nodes (Figures 10 & 12, column 6 lines 21-28, lines 51-60, column 9 lines 50-67) based on the group of location of associated physical resources (column 13 lines 1-20, column 14 lines 48-55, column 17 lines 18-31) and natural couplings of associated service software (column 4 lines 44-55, column 23 lines 38-54); and c) a distribution means for distributing service functionality to nodes in accordance with the distribution scheme (column 6 lines 21-28, lines 51-60, column 9 lines 50-67).

8. Lumelsky taught the invention substantially as claimed. However, Lumelsky did not expressly teach a distribution scheme wherein the distribution scheme involves placement of nodes based on minimization of inter-node interactions and a distribution means wherein a service logic execution engine is informed of one or more locations to which one or more application components are distributed.

9. Lumelsky suggested exploration of art and/or provided a reason to modify the system for enabling distribution of service functionality with the distribution scheme constraint (column 6 lines 51-60) and location-based distribution features (column 14 lines 48-55).

10. Qureshi disclosed a distribution scheme wherein the distribution scheme involves placement of nodes based on minimization of inter-node interactions (Figure 2, column 2 lines 50-54, column 4 lines 31-47) and a distribution means wherein the service logic execution engine is informed of one or more locations to which one or more application components are distributed (Figure 9, column 6 lines 6-17, lines 32-38, column 11 lines 13-21, column 12 lines 29-46).

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11. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Lumelsky with the teachings of Welling to include the distribution scheme constraint and location-based distribution features in order to manage and control the distribution and placement of component objects (Lumelsky, column 6 lines 51-60) since this would effectively permits control and customization of system resources (Lumelsky, Abstract).

12. Regarding claim 2, Lumelsky disclosed a system wherein the distribution scheme involves executing where one or more associated physical resources are located (column 13 lines 1-20, column 14 lines 48-55, column 17 lines 18-31).

13. Regarding claim 3, Lumelsky disclosed a system wherein the distribution scheme comprises a selection function to determine one or more nodes to be invoked (Figures 13a-13b, column 12 lines 26-39, column 16 lines 11-25, column 28 lines 61-65).

14. Regarding claim 4, Lumelsky disclosed system wherein the selection function comprises executing an algorithm (Figures 13a-13b, column 16 lines 11-25, column 25 lines 42-54).

15. Regarding claim 6, Lumelsky disclosed a system wherein the distribution scheme involves making efficient use of network resources (column 4 lines 44-55, column 21 lines 29-53).

16. Regarding claim 8, Lumelsky disclosed a system wherein one or more service logic execution engines execute on one or more participating nodes in the network (column 23 lines 62-67, column 24 lines 1-23).

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17. Regarding claim 9, Lumelsky disclosed a system wherein multiple parallel servers are configured to execute a service wherein the throughput is scalable to a desired level (column 6 lines 61-67, column 7 lines 1-24, column 12 lines 4-13).

18. Regarding claims 10-13, 15, and 16-17, the method corresponds directly to the system of claims 1-4, 6, 8-9, and thus these claims are rejected using the same rationale.

19. Regarding claims 18-21, 23, 25-26, the processor readable medium corresponds directly to the system of claims 1-4, 6, 8-9 and the method of claims 10-13, 15, and 16-17, thus these claims are rejected using the same rationale.

20. Regarding claim 27, Qureshi disclosed a system wherein the service logic execution engine enables event passing between application components during execution (Figures 8-10, column 6 lines 6-17, lines 32-38, column 8 lines 28-34).

21. Since all the limitations of the claimed invention were disclosed by the combination of Lumelsky and Qureshi claims 1-4, 6, 8-13, 15-21, 23 and 25-27 are rejected.

### ***Response to Arguments***

22. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

23. Applicant's arguments, filed 12/15/2004, with respect to claims 1-4, 6, 8-13, 15-21, 23 and 25-27 have been considered but are moot in view of the new ground(s) of rejection.

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24. As the rejection reads, Examiner asserts that the combination of these teachings render the claimed invention obvious.

***Conclusion***

25. Applicant's previous amendment received on 07/14/2004 necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam (Jenny) Phan whose telephone number is (571) 272-3930. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on (571) 272-3925. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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February 4, 2005